

**Watershed Study Impact Mitigation Plan
for
City of Hutchinson (Hutchinson Utilities Commission)
Gas Transmission Pipeline
from Trimont to Hutchinson**

Table of Contents

Purpose and Applicability.....	1
General Provisions	2
Definitions	3
Mitigative Actions	3
1. Erosion Control Before Construction.....	3
2. Erosion Control during Construction.....	3
3. Erosion Control after Construction.....	3
4. Timing of Construction	4
5. Changes in Subsurface Flow Patterns	4
6. Pumping of Water from Open Trenches.....	4
7. Inspection.....	4
8. Procedures for Determining Construction-Related Damages to Watershed Study and Compensation.....	4

Purpose and Applicability

This Watershed Study Impact Mitigation Plan is intended to implement condition D, “Minimization of Construction Activities on Watershed Study”, of the routing permit issued by the Environmental Quality Board to the City of Hutchinson (Hutchinson Utilities Commission) (MEQB Docket No. 02-33-PRP-HUC), which states as follows:

The Permittee shall, after consultation with representatives from the Nicollet County Soil and Water Conservation District, the Minnesota Department of Agriculture, the Nicollet County Environmental Services, and the University of Minnesota Department of Soil, Water, and Climate, develop and implement a mitigation plan to minimize the impact of pipeline construction on a watershed study presently underway in Nicollet County. The Permittee shall not commence construction of the pipeline between milepost 48 and 53 in Nicollet County prior to July 1, 2003, unless the mitigation plan provides for a different date, in which case construction shall start as provided by the plan.

The Paired Watershed Study and potential impacts to it are described in findings no. 88-89 of the Environmental Quality Board Findings of Fact, Conclusions, and Order on the project dated December 19, 2002:

88. *A coalition of farmers, state and county agency personnel, and the University of Minnesota extension faculty, has been conducting a paired watershed study in Nicollet County since 2001. Researchers are monitoring flow, sediment, phosphorus, and nitrate at the mouth of the watershed and are attempting to evaluate the effect of farm conservation and nutrient management strategies on water quality. Farmers on one side of the paired watershed implemented certain best management practices in the fall of 2002, while farmers on the control side made no changes. The watershed study is scheduled to continue for three years. The study is being federally funded in an amount exceeding \$500,000.*
- 89 *The pipeline traverses the watershed study area from milepost 49 to milepost 53. Construction of the pipeline, particularly at sensitive periods in the spring, could interfere with the study and jeopardize the results. The City of Hutchinson has agreed to meet with the people*

conducting the study and establish reasonable construction practices that will minimize the impact of construction on the study.

The pipeline route will cross the Huelskamp Creek West Watershed, which is the “treatment” side of the Paired Watershed Study; the watershed where farmers began implementing certain best management practices in the fall of 2002. The Huelskamp Creek East Watershed is the “control” side of the Paired Watershed Study; the watershed where farmers make no changes. Water quality monitoring results from the two watersheds (two sides of the study) are being compared to evaluate the effect of the farm conservation and nutrient management strategies in the treatment watershed (the Huelskamp Creek West Watershed).

The intent of this Watershed Study Impact Mitigation Plan is to avoid, mitigate, or compensate for potential impacts of the construction of the pipeline on the Paired Watershed Study. These potential impacts include erosion and sedimentation that could invalidate the water quality monitoring data results from the treated watershed in the Paired Watershed Study. Failure to adequately address these impacts could threaten the entire \$530,000 study.

General Provisions

- A. This plan applies to the Paired Watershed Study Area, also known as the Huelskamp Creek West and Huelskamp Creek East Watershed, generally as shown on the attached map.
- B. The provisions of the Agricultural Impact Mitigation Plan (that implements condition VI. A, “Agricultural Impact Mitigation Plan”, of the routing permit) will apply in the Paired Watershed Study Area in addition to the provisions of this plan. Within the Paired Watershed Study Area, if a provision of one of the plans is in any conflict with a provision of the other, the provision of the Watershed Study Impact Mitigation Plan will supercede that of the Agricultural Impact Mitigation Plan.
- C. The University of Minnesota Department of Soil, Water, and Climate, in consultation with the Nicollet County Soil and Water Conservation District, the Minnesota Department of Agriculture, and the Nicollet County Environmental Services, will designate a person to serve as a single point of contact with the City. This person will hereafter be referred to as the Study Partners’ Representative.
- D. The mitigative actions of this plan are subject to change by landowners and landowner's designates according to the Agricultural Impact Mitigation Plan, General Provisions, item B, except that any changes under that item also require the written consent of the Study Partners’ Representative.

Definitions

Definitions contained in the Agricultural Impact Mitigation Plan for this project will also apply to this Plan.

Mitigative Actions

1. Erosion Control Before Construction

Prior to construction of the pipeline, the following methods must be used to control erosion:

- A. The planting of a crop by the landowner or tenant. However, if a crop is planted before construction of the pipeline, the City must chop any remaining crop prior to construction as directed by the landowner or tenant; or
- B. The seeding by the landowner or tenant of rye, oats, or other suitable and economical cover crop on the right-of-way; or
- C. Other effective methods such as mulching as mutually agreed upon by the City and the landowner or tenant and as recommended by the Study Partners' Representative or his/her designee.

2. Erosion Control during Construction

The City and the Study Partners' Representative or his/her designee will consult on the potential for erosion during construction. The City will install construction erosion control measures as mutually determined by the consultation. Generally, construction erosion control measures will consist of screening on surface drainage tile intakes and culverts on the downstream side of the right-of-way that could receive sediment from construction erosion. If there is a disagreement between the City and the Study Partners' Representative, the appropriate construction erosion control will be determined by the Commissioner of Agriculture.

3. Erosion Control after Construction

The City will be responsible for applying mulch at a rate of two tons per acre as soon as practicable after the pipeline trench has been backfilled and any decompaction, regarding, rock removal, or other such construction-related activities have been completed. However, if a landowner elects to negotiate with the City a different method of ground cover (such as seeding

a cover crop), such alternative ground cover must be approved by the Study Partners' Representative or his/her designee.

4. Timing of Construction

The City will strive to postpone construction of the pipeline in the watershed area until after July 15, 2003, but in any event will not begin construction in the watershed area prior to July 1, 2003. The City recognizes that construction before July 15 increases the chances of a rain event that can potentially compromise the Paired Watershed Study and trigger the process to determine damages according to Item No. 8.

5. Changes in Subsurface Flow Patterns

The City and the Study Partners' Representative or his/her designee will consult about the potential for subsurface water migration and erosion resulting from water migration. The City will install mitigation measures to reduce the chances for erosion resulting from water migration as mutually determined by the consultation. If there is a disagreement between the City and the Study Partners' Representative, the appropriate construction erosion control will be determined by the Commissioner of Agriculture.

6. Pumping of Water from Open Trenches

Any water pumped from open trenches as discussed in the Agricultural Impact Mitigation Plan, Mitigative Actions, item 17, must be filtered through hay bales prior to discharge.

7. Inspection

The Study Partners' Representative may designate a person or persons to inspect the pipeline construction for compliance with this plan, and to conduct water quality monitoring as part of the Paired Watershed Study. The City will provide reasonable access to the construction site for this purpose.

8. Procedures for Determining Construction-Related Damages to Watershed Study and Compensation

The Study Partners will conduct water quality monitoring in the Huelskamp Creek West Watershed downstream of the pipeline construction site immediately after any rain or snowmelt event that occurs during the period from construction to planting the following spring (Spring 2004). Monitoring results will be compared with monitoring data from the same locations taken during previous and comparable rain and snowmelt events. Data collected for the same rain or snowmelt event(s) in the Huelskamp Creek East Watershed will be used as well. Any statistically-significant increases in sediment found in the monitoring conducted downstream of the pipeline construction site, when compared with the other monitoring data, will be strong

evidence that the Paired Watershed Study has been compromised as a result of the pipeline project.

Based on the above evidence, if the Study Partners determine that the Paired Watershed Study has been compromised due to significant increases in sediment, phosphorus, or nitrate in water quality monitoring data results from the treated watershed during this time, the City will reimburse the Study Partners for actual costs of extending the study an additional year up to \$90,000. If the City disputes that the study has been compromised, it may submit the matter to mediation by an agreed-upon third party. If no mediation agreement is reached, the City may seek a declaratory judgment in district court. The burden of proof shall be upon the City.